



# VENDOR OVERSIGHT

Nuclear Quality Oversight Conference

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Division of Engineering

Quality and Vendor Branch A



# Quality and Vendor Branch, NRR

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- NRR Reorganization in October 2005
  - Two Quality and Vendor branches in Division of Engineering
- Key Areas of Review:
  - Quality Assurance Program Descriptions
  - Extended Power Uprate Testing Programs
  - New Reactor Licensing Reviews and Inspections
    - Early Site Permits
    - Design Certifications
    - Combined License Applications
  - Vendor Inspections
  - NUPIC Audit Process Oversight
  - 10 CFR Part 21 Program Evaluations



# NRC Vendor Oversight

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- NRC/NUPIC Interface
  - Draft Protocol for Observation of NUPIC Audits
  - ENSA, Westinghouse/NUPIC Audit Santander, Spain, September 2005
- Quality and Vendor Branch Inspections
  - General Electric Nuclear Energy (GENE), Wilmington, NC, November 2005
  - Flowserve, Raleigh, NC, January 2006



# NRC/NUPIC Interface

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- **Equipos Nucleares, SA (ENSA)**
  - 3 NRC Inspectors Observed the Westinghouse led/NUPIC (TXU & PGE) joint audit.
  - Audit team identified 12 findings with ENSA implementation of their QA program:
    - Indoctrination and Training
    - Design control
    - Document control
    - Control of Special Processes (welding)
    - Control of Measuring & Test Equipment
    - Corrective Action
    - Quality Assurance Records
    - Internal Audits and Supplier Audits
    - Nonconforming, Materials, Parts ,and Components (including 10 CFR Part 21)



# NRC Vendor Inspections

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- GENE ESBWR Design Certification
- Inspection Report Findings Issued January 11, 2006 (ML053560155)
  - GENE did not implement the ESBWR design control process.
  - External supplier audits performed by GENE did not identify and audit against the appropriate quality assurance program requirements.
  - GENE did not document or maintain training records.
  - GENE did not perform internal self-audits of the ESBWR program.
  - GENE did not complete the acceptance reviews associated with several ESBWR corrective action reports within the 30 day period.



# NRC Vendor Inspections

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- Flowserve – Major Supplier of Safety Related Valves and Flow Control Devices
- Inspection Report Findings Issued February 8, 2006 (ML060310185)
  - Flowserve did not adequately implement their corrective action process.
  - Flowserve did not have procedures in place to perform 10 CFR Part 21 evaluations of significant conditions adverse to quality identified in their corrective action process.
  - Flowserve failed to implement appropriate procedural guidance.



# 10 CFR Part 21

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- NRC will be verifying implementation of 10 CFR 21 as required by 10 CFR 21.21 during NUPIC observations and NRC vendor inspections.
- Recent Inspection/NUPIC Audit Findings
  - Misunderstanding of Part 21 passed down to commercial grade suppliers on procurement documents.
  - Inadequate Part 21 evaluation procedure.
  - Inadequate Appendix B procedural control to tie corrective action process into Part 21 evaluation process when applicable.



# Commercial-Grade Calibration Suppliers

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- Arizona Public Services – Bases of NRC approval documented in safety evaluation report (SER) dated September 28, 2005 (ML052710224).
- Alternative method for qualifying suppliers in lieu of supplier audit, commercial-grade survey, or in-process surveillance for commercial-grade suppliers of calibrations services.
- NRC staff has received inquiries regarding the applicability of SER to vendors.





# Commercial-Grade Calibration Suppliers

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- 3<sup>rd</sup> party accreditation is to ANSI/ISO/IEC 17025.
- NRC review and approval limited to NVLAP and A2LA, as recognized as ILAC signatories (applies to domestic suppliers only).
- Scope of accreditation covers contracted services.
- Purchase documents impose additional technical and administrative requirements to satisfy necessary QA program and technical requirements.
- Purchase documents require reporting as-found calibration data when calibrated items are found to be out-of-tolerance.
- Purchase document shall require identification of the laboratory equipment/standards used.



# NRC Future Activities

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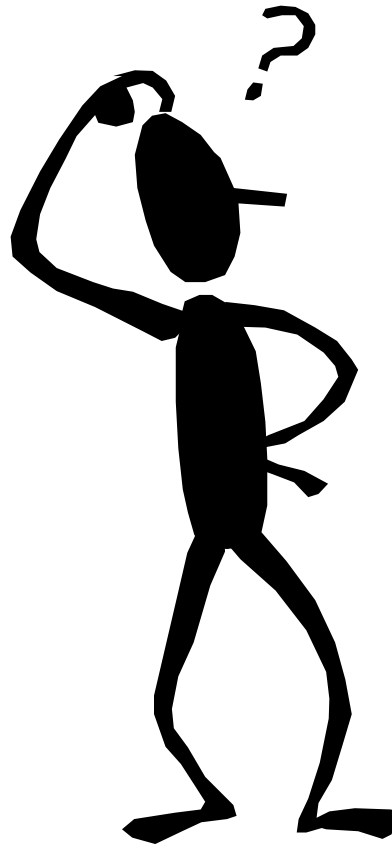
- Observation of future NUPIC audits.
- Development of Quality and Vendor Branch Website.
- Continuation of ASME/NQA-1 Activities.
- Continuation of Reviews and Inspections of Design Certifications, Early Site Permits, and Combined Licenses.



# The Last Slide

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- Questions?



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